# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/824,364	04/15/2004	Chang Nam Kim	K-0633	6307	
34610 7	590 11/09/2006		EXAMINER		
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153		· ,	GUHARAY	GUHARAY, KARABI	
			ART UNIT	PAPER NUMBER	
,		·	2879		
			DATE MAILED: 11/09/200	DATE MAILED: 11/09/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/824,364	KIM, CHANG NAM			
		Examiner	Art Unit			
		Karabi Guharay	2879			
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address			
WHIC - Externafter - If NC - Failur Any	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING D. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period or tre to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status	•					
1)⊠	Responsive to communication(s) filed on <i>Ame</i>	ndment filed on 9 August 2006				
		action is non-final.				
3)						
,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
·						
	Claim(s) <u>1-3,5 and 7-23</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.					
	Claim(s) is/are allowed.					
· -						
7) <u> </u>	Claim(s) 1-3,5 and 7-23 is/are rejected.					
8)						
•		election requirement.				
Applicati	ion Papers					
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority ι	ınder 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2) 🔲 Notic 3) 🔲 Inforr	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

Application/Control Number: 10/824,364

Art Unit: 2879

## Response to Amendment

Amendment, filed on 9 august 2006, has been considered and entered.

English translation of the priority document has been entered.

Amendments of specification and drawings are approved.

Claims 1, 2, 5 and 7-10 are amended.

Claims 4 and 6 are canceled.

New claims 11-23 are added.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 11-17 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Murayama et al. (JP 2001-230073).

Regarding claims 1 & 11, Murayama discloses an organic EL panel (Fig 15) comprising an emitting cell (1) comprising an ITO strip (3a), a supplement electrode (3b of Fig 8), an organic EL layer (8a of Fig 10), and an anode strip (9 of Fig 12); a bulkhead (7) for insulating the emitting cell (1) from the anode strip (see Fig 12), and at least one supplemental bulkhead (15 of Fig 10 and Fig 15) coupled to the bulkhead 7 (see paragraphs 9-15 of English Translation).

Regarding claims 2 & 12, Murayama discloses that the supplemental bulkhead (15) is provided in an area between the emitting cell and a sealant (Fig 15, Abstract).

Application/Control Number: 10/824,364

Art Unit: 2879

Regarding claims 3 & 13, Murayama discloses that the supplemental bulkhead is perpendicular, thus forming a predetermined angle with the bulkhead (7, see 12).

Regarding claim 14, Murayama discloses that the supplemental bulkhead includes 3 segments (see Fig 27).

Regarding claims 15 & 16, Murayama discloses that the supplemental bulkhead (15) comprises a first supplemental bulkhead segment perpendicular (or first predetermined angle) to and connected with at least one of the bulkheads; a second supplemental bulkhead segment parallel to said one of the bulkheads and connected with the first supplemental bulkhead segment; and a third supplemental bulkhead segment perpendicular (or a second predetermined angle) to said one of the bulkheads and connected with the second supplemental bulkhead segment (see Fig 26).

Regarding claim 17, Murayama discloses that the supplemental bulkhead comprises a first supplemental bulkhead segment curved to and connected with at least one of the bulkheads; a second supplemental bulkhead segment parallel to said at least one of the bulkheads and connected with the first supplemental bulkhead segment; and a third supplemental bulkhead segment curved to said at least one of the bulkheads and connected with the second supplemental bulkhead segment (see Fig 28).

Regarding claims 20 & 21, Murayama discloses an organic EL display panel (Fig 48) comprising a plurality of emitting cells (area enclosing by anode strip 9) on an emitting region of a substrate; a sealant formed in a region other than the emitting region (not shown in figures, see paragraph 17) and a supplemental bulkhead (15a)

Application/Control Number: 10/824,364

Art Unit: 2879

angled between the emitting cell and the sealant (see Fig 47) so as to prevent sealant from permeating into the emitting region (clearly shown in Fig 48).

Regarding claim 22, Murayama discloses that the at least one supplemental bulkhead is coupled to two bulkheads (see Fig 48).

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 7-10, 18-19 & 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art, and further in view of Murayama et al. (JP 2001-230073).

Regarding claims 5, 7, 9-10, 18-19 & 23, AAPA discloses a method of manufacturing an organic EL display panel comprising forming a supplemental electrode (103 of Fig 1) in a smaller width than an ITO strip, forming an insulating film (106), forming a bulkhead (107), forming an organic EL layer (104) and an anode strip (105) and adhering a seal cover (109) and a glass substrate (101) by a sealant, wherein the insulating film (106) is around the organic EL layer from a predetermined area including the sealant to a portion of the glass substrate (see Fig 1).

However, AAPA Fails to disclose a supplemental bulkhead coupled to the bulkhead formed at the same time with the bulkhead.

However, Murayama, in the same field of organic EL panel discloses forming a bulkhead (barrier 7) and at least one supplemental bulkhead (15) at the same time coupled to the bulkhead (see Figs 10, 12, 15 & 18). Murayama further teaches that such configuration of bulkheads provide OLED with high reliability (see Abstract).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a supplemental bulkhead as taught by Murayama et al. in the device of AAPA, since this will provide high reliability of the display.

Regarding claim 8, AAPA further discloses forming a short ITO strip (102A of Fig 2A-2B), which is shorter than the ITO strip (102) between the bulkhead (107) and at least one other bulkhead (Fig 2D).

#### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karabi Guharay whose telephone number is 571-272-2452. The examiner can normally be reached on Monday-Friday 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/824,364 Page 6

Art Unit: 2879

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kgnhersay Karabi Guharay Primary Examiner Art Unit 2879 ひんりを